The tensor theory of Banach spaces, operator spaces, and operator systems

This course will begin with an overview of Grothendieck's work classifying the possible norms on tensor products of Banach spaces, which is the model for all other tensor theories. We will then develop parallel theories for the categories whose objects consist of operator spaces and operator systems with morphisms the completely contractive and unital completely positive maps, respectively. Applications developed will include the tensor characterization of operator algebras, Pisier's theory of similarity and factorization degree, and the tensor theory of C*-algebras.